

<b>Office Action Summary</b>	<b>Application No.</b> 10/664,126	<b>Applicant(s)</b> TODD ET AL.	
	<b>Examiner</b> John J. Figueroa	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 8 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 15-18, 20-31, 47-68, 82 and 83 is/are pending in the application.
- 4a) Of the above claim(s) 24-27, 31, 51-54 and 68 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-18, 20-23, 28-30, 47-50 and 55-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The 35 U.S.C. 102(b) rejection of claims 15-18, 20-23, 29, 30, 47-50, 56-64, 66 and 67 over United States Patent Number (USPN) 6,387,986 B1 to Moradi-Araghi, hereinafter 'Moradi-Araghi' is *maintained* for the reasons previously made of record in items 5 and 7 on pages 3 and 7, respectively, of the Office Action of August 8, 2007, hereinafter 'OA'.
2. The 35 U.S.C. 103(a) rejection of claims 15, 23, 28, 47, 50, 55 and 65 over Moradi-Araghi in view of either USPN 5,728,652 to Dobson et al. (hereinafter 'Dobson'); USPN 5,191,931 to Himes et al (hereinafter 'Himes '); or USPN 4,531,594 to Cowan (hereinafter 'Cowan'), has been *maintained* for reasons previously made of record in items 6 and 8 on pages 4 and 7, respectively, of OA. This rejection has been extended to new claims 82 and 83 as discussed below.

### ***Election/Restrictions***

3. Applicant's election to prosecute the claims in Group I of the restriction requirement and the election of poly(orthoesters) as the species for the degradable material was acknowledged previously in OA. This restriction requirement was deemed proper and made Final in the Final Office Action of December 29, 2006.

4. Accordingly, claims 15-18, 20-23, 28-30, 47-50, 55-67, 82 and 83 have been examined whereas claims 24-27, 31, 51-54 and 68 have been withdrawn as drawn to a non-elected invention/species but remain pending in the current application.

***Claim Rejections - 35 USC § 112***

5. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

6. Claim 83 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is indefinite because the preamble recites the claim depending from “[t]he method of claim 47”. Independent claim 47 is drawn to a well drill-in and servicing fluid and there is no method step recited in this independent claim. It is unclear as to whether Applicant intended the rejected claim to depend from the *fluid* of claim 47 or, alternatively, from one of the *method* claims.

***Claim Rejections - 35 USC § 103***

7. Claims 82 and 83 are rejected under 35 U.S.C. 103(a) as unpatentable over Moradi-Araghi in view of Dobson, Himes **or** Cowan.

In the response filed November 8, 2007 (hereinafter ‘Response’), Applicant has added new claims 82 and 83, which limit the fluid loss in the method/composition recited in claims 15 and 57, respectively, to less than about 15 ml per API Recommended Practice 13.

Moradi-Araghi was discussed in the previous office action and is applied here as such. Although Moradi-Araghi discloses the fluid composition used for preventing fluid loss in drilling applications (col. 6, line 64), the reference is silent as to the amount of fluid loss prevented in a drilling application.

However, as stated in item 6 of OA (and in paragraph #9 below), Dobson; Cowan; and Himes teach that it is conventional to alter the particle size of fluid composition additives to provide enhanced fluid loss prevention (e.g., less than 15 mL) in oil field applications. (Dobson, col. 5, line 51 to col. 6, line 12; Himes, abstract; Cowan, col. 5, lines 29-43)

Therefore, it would have been obvious to a person of ordinary skill in the art to optimize the amount and/or particle size of the bridging agent/degradable polymer of the drilling fluid composition disclosed in Moradi-Araghi. One skilled in the art would have been motivated to do so to incorporate the teachings of Dobson, Himes or Cowan and attain a superior drilling fluid having an effective bridging of the formation pores and enhanced fluid loss prevention that can be, e.g., less than 15 mL in accordance with API Recommended Practice 13..

Thus, the instant claims are unpatentable as obvious over Moradi-Araghi in view of Dobson, Himes or Cowan.

### ***Response to Arguments***

#### ***The 35 U.S.C. 102 Rejection over Moradi-Araghi (item 5 on page 3)***

8. Applicant's arguments in Response traversing the 35 U.S.C. 102(b) rejection of claims 15-18, 20-23, 29, 30, 47-50, 56-64, 66 and 67 as anticipated by Moradi-Araghi have been fully considered but deemed unpersuasive.

Applicant's arguments regarding Moradhi-Araghi not expressly disclosing the (poly)orthoester-containing composition to function as a bridging agent are not persuasive because the present specification in paragraph [0023] (and instant claims 22 and 49) clearly teaches (poly)orthoesters as suitable degradable polymers for the present invention. It is unclear from Applicant's arguments in Response as to why Moradi-Araghi's composition for oil field applications containing (poly)orthoester, which is encompassed by instant independent claims 15 and 47, would not function in the same manner when provided into an oil well/borehole. Simply giving the same component a different name will not change its inherent function.

Applicant's arguments concerning the particle size of the degradable material, albeit interesting, are not relevant to the **rejected** claims in the instant 102 rejection because these claims do not limit the size of the bridging agent. Moreover, the present specification does not disclose a requirement for the particular size of the bridging agent/degradable polymer. The specification states in paragraph [0035] that in *certain* embodiments the particle size of the degradable material can be within a range of 0.1 microns to 1.0 millimeters. Thus, because neither the instant rejected claims nor the

Art Unit: 1796

present specification impose any limitation upon the particle size of the degradable polymer, and, further, because Moradi-Araghi is disclosing a composition containing (poly)orthoesters (bridging agent/degradable material) encompassed by the instant claims for use in the same applications (oil field applications), then it follows that the (poly)orthoester composition in Moradi-Araghi in an oil field application can act as a bridging agent.

Similarly, in response to Applicant's arguments that Moradi-Araghi does not expressly disclose the bridging agent/degradable material to be present in sufficient amount to form an "*efficient* filter cake", this limitation is not explicitly recited in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Further, as discussed in item 5 of OA, Moradi-Araghi discloses the presence of the "first polymer" (polyorthoester) to be within the range recited in claim 30 (and in paragraph [0022] of the present specification), which is taught in the specification as a suitable range for the degradable polymer of the present invention.

Consequently, because Moradi-Araghi is disclosing a drilling composition comprising a bridging agent/degradable material encompassed by the instant rejected claims and that is in accordance with Applicant's specification, the instant claims accordingly remain anticipated by Moradi-Araghi.

The 103 Rejection over Moradi-Araghi (item 6 on page 4 of OA)

9. Applicant's arguments in Response traversing the 35 U.S.C. 103 rejection of claims 15, 23, 28, 47, 50, 55 and 65 as unpatentable over Moradi-Araghi in view of Dobson, Himes **or** Cowan have been fully considered but deemed unpersuasive.

Examiner's response to Applicant's arguments traversing Moradi-Araghi previously presented in paragraph #8 apply equally to the instant rejection and are incorporated herein. As discussed above, Moradi-Araghi discloses a drilling composition (and method of drilling using thereof) containing a poly(orthoester) degradable material/bridging agent in accordance with the claims and the present specification.

Concerning the particle size range limitation recited in claims 28 and 55, Applicant's arguments that it would not have been within the purview of one in the art to control the particle size of the degradable material/bridging agent are unpersuasive. As stated previously, Moradi-Araghi discloses a (poly)orthoester oil field fluid composition (and method of use thereof) that is encompassed by the instant claims. The secondary prior art (Dobson, Himes or Cowan) teaches that it is routine to alter the particle size of fluid composition additives to provide an enhanced fluid loss prevention (e.g., less than 15 mL). It would have been obvious to one skilled in the art, in view of the prior art, to manipulate the particle size of the bridging agent/degradable polymer component of Moradi-Araghi's composition to attain a desired fluid loss prevention, as taught by Dobson, Himes and Cowan.

In response to Applicant's argument that Dobson, Himes and Cowan are nonanalogous art with respect to Moradi-Araghi, it has been held that a prior art reference must either be in the field of Applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which Applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Moradi-Araghi and the secondary prior art are analogous art because they are drawn to the same problem, that is, fluid loss prevention in drilling/oil field applications.

Thus, the instant claims remain unpatentable under 35 U.S.C. 103 as obvious over Moradi-Araghi and either Dobson, Himes or Cowan.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Monday-Thursday 8:00-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG

/Randy Gulakowski/  
Supervisory Patent Examiner, Art Unit 1796